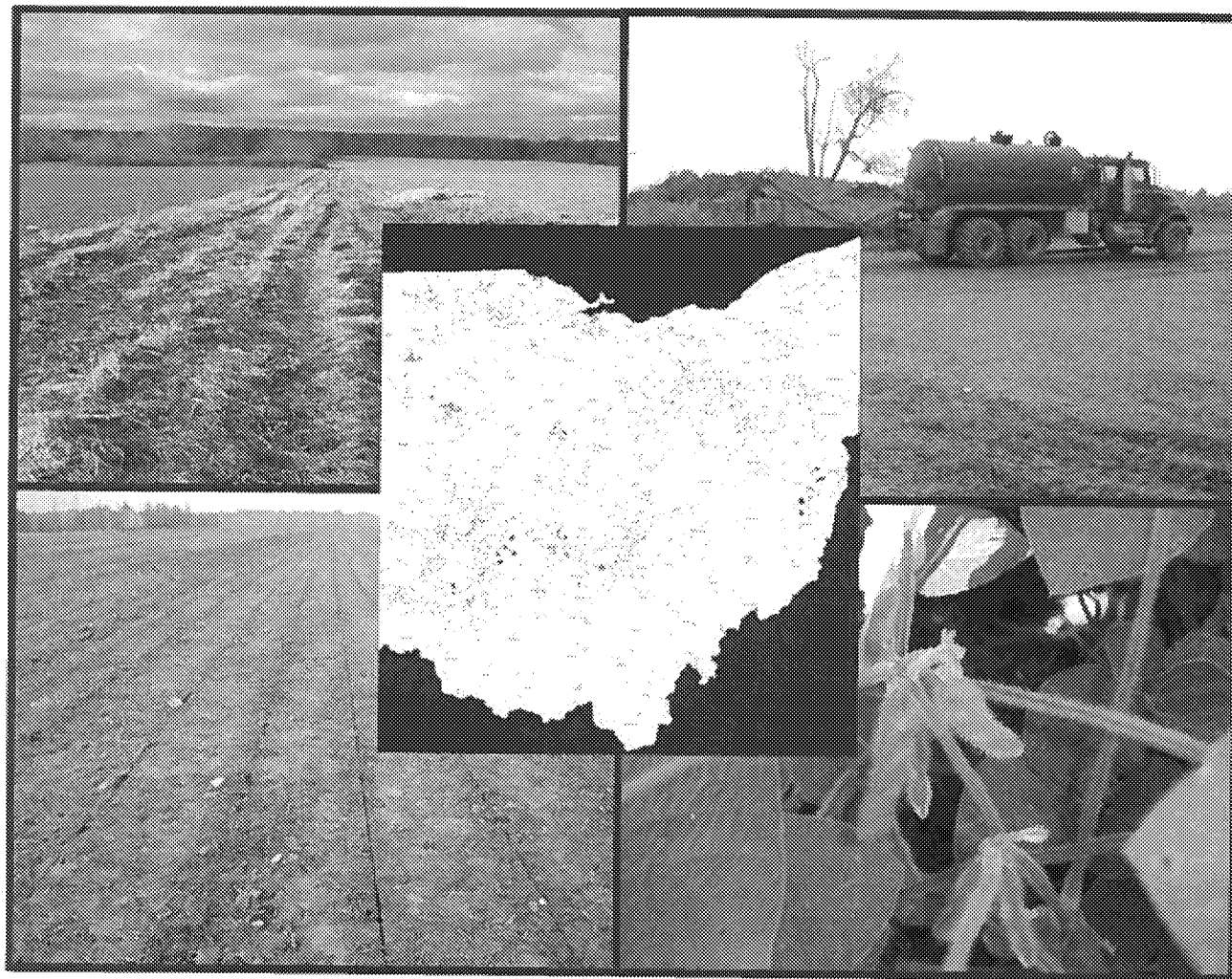


# Application for Authorization: Class B Biosolids Beneficial Use Sites



Division of Surface Water  
Application for Authorization: Class B Beneficial Use Sites

**Biosolids Treatment Works Information**

Treatment works name: Emerald BioEnergy		
Ohio NPDES permit #: 4IN00204*AD	County: Morrow	
Mailing address: 461 State Route 61		
City: Marengo	State: OH	Zip: 43334
Operator of record: Taylor Faecher		
Telephone number: (419) 253-5300		
Email address: tfaecher@renergy.com		

**Certification Statement**

1. I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment.
2. I have read and understand Chapter 3745-40 of the Ohio Administrative Code (OAC) and I agree to beneficially use biosolids in accordance with all applicable beneficial use requirements and restrictions established in Chapter 3745-40 of the Ohio Administrative Code.
3. I agree to only beneficially use biosolids that have satisfied a pathogen reduction alternative and a vector attraction reduction option and have metals concentration below the pollutant ceiling concentrations as established in Chapter 3745-40 of the Ohio Administrative Code.
4. I agree to maintain all applicable records established in Chapter 3745-40 of the Ohio Administrative Code.

  
Signature

2 / 12 / 18  
Date

This form shall be signed by the operator of record for the treatment works, be an original signature, not a copy, and must be less than one year old at the time the application for transfer is submitted to Ohio EPA for review.

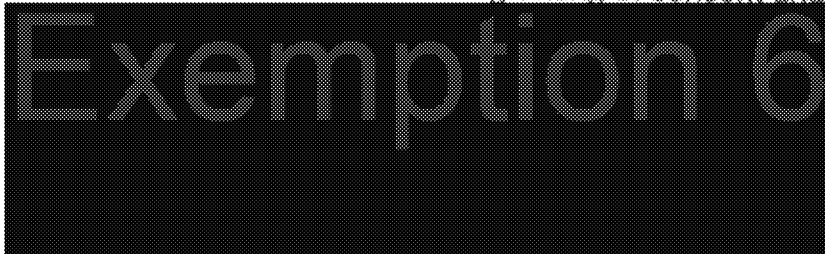
Division of Surface Water  
Application for Authorization: Class B Beneficial Use Sites

Owner Consent for Beneficial Use



Certification Statement

1. I agree to allow biosolids generated by the treatment plant identified on Form BUA-1 to be beneficially used on my property at agronomic rates.
2. I agree to allow federal, state and local regulatory staff access to the beneficial use site for the purposes of inspecting and authorizing the beneficial use site, beneficially using biosolids, and collecting and analyzing samples from the beneficial use site. I reserve the right to ask the above parties for proper identification at any time.
3. I certify that I am holder of legal title to the property described on application form BUA-5, or am authorized by the holder to give consent for the land application of biosolids, and that there are no restrictions to the granting of consent under this form.



7 / 9 / 18  
Date

Original signatures, not copies, must be less than one year old at the time the application for transfer is submitted to Ohio EPA for review.

<sup>1</sup> For purposes of this form, "beneficial use site owner" means the person who owns the legal rights to the proposed beneficial use site.

<sup>2</sup> In the event the owner of the beneficial use site changes, Form BUA-2 must be revised and resubmitted to Ohio EPA.

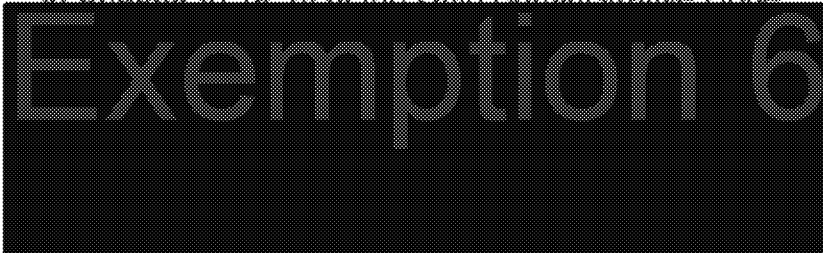
Division of Surface Water  
Application for Authorization: Class B Beneficial Use Sites

Beneficial Use Site Operator Consent for Beneficial Use



Certification Statement

I agree to be responsible for complying with all applicable beneficial use requirements established in Chapter 3745-40 of the Ohio Administrative Code.



7 / 9 / 18  
Date

Original signatures, not copies, must be less than one year old at the time the application for transfer is submitted to Ohio EPA for review.

<sup>1</sup> For purposes of this form, "beneficial use site operator" means the person who plants, grows, harvests or otherwise manages feed crops, fiber crops, food crops or pasture land on the proposed beneficial use site.

<sup>2</sup> In the event the operator of the beneficial use site changes, Form BUA-3 must be revised and resubmitted to Ohio EPA.


Division of Surface Water  
Application for Authorization: Class B Beneficial Use Sites

**Beneficial User Information**

Beneficial user <sup>1</sup> : Emerald BioEnergy		
Contact person: Taylor Faecher		
Mailing address: 461 State Route 61		
City: Marengo	State: OH	Zip: 43334
Telephone number: (419) 253-5300		
Email address: tfaecher@reenergy.com		

**Certification Statement**

I agree to be responsible for complying with all applicable beneficial use requirements established in Chapter 3745-40 of the Ohio Administrative Code.

  
\_\_\_\_\_  
Signature<sup>2</sup>

2 / 12 / 18  
\_\_\_\_\_  
Date

**Original signatures, not copies, must be less than one year old at the time the application for transfer is submitted to Ohio EPA for review.**

<sup>1</sup> For purposes of this form, the beneficial user means the person who sprays or spreads Class B biosolids onto the surface of the beneficial use site, injects below the surface of the beneficial use site, or incorporates into the soil of the beneficial use site, for the purpose of providing an agronomic benefit.

<sup>2</sup> In the event the beneficial user of the beneficial use site changes, Form BUA-4 must be revised and resubmitted to Ohio EPA.

Division of Surface Water  
Application for Authorization: Class B Beneficial Use Sites

Ohio EPA Application for Authorization (8/15)

Form BUA-4

Page 4 of 6

**Beneficial Use Site Information**

<b>Ohio EPA Site I.D.</b> (Ohio EPA Use Only)

Field site I.D.: MOS-03-13																															
Beneficial use site location: Southwest corner of Co Rd 21 and Co Rd 24																															
County: Morrow		Township:																													
Latitude: 40.41859		Longitude: -82.86174																													
Total acreage proposed for beneficial use: 39																															
<b>Type of beneficial use to be performed:</b>  Surface application <input checked="" type="checkbox"/> Injection or immediate incorporation <input checked="" type="checkbox"/>		<b>Ground slope percent:</b> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="padding: 2px;">Less than 15%</td> <td style="text-align: center; width: 20px;"><input checked="" type="checkbox"/></td> <td style="padding: 2px;">15% to 19.9%</td> <td style="text-align: center; width: 20px;"><input type="checkbox"/></td> </tr> <tr> <td style="padding: 2px;">Greater than 20%</td> <td style="text-align: center;"><input type="checkbox"/></td> <td colspan="2"></td> </tr> </table>		Less than 15%	<input checked="" type="checkbox"/>	15% to 19.9%	<input type="checkbox"/>	Greater than 20%	<input type="checkbox"/>																						
Less than 15%	<input checked="" type="checkbox"/>	15% to 19.9%	<input type="checkbox"/>																												
Greater than 20%	<input type="checkbox"/>																														
Soil pH (s.u):		Soil phosphorus (mg/kg): _____																													
Bedrock depth (feet): 6.56 feet		Bray Kurtz P1 <input type="checkbox"/> Mehlich 3 <input type="checkbox"/>																													
<b>Type of crops to be grown:</b> <table border="1" style="float: right; margin-left: 20px; border-collapse: collapse;"> <thead> <tr> <th style="padding: 5px;">Crop Type</th> <th style="padding: 5px;">Expected Yield</th> </tr> </thead> <tbody> <tr> <td style="padding: 5px;">Corn</td> <td style="text-align: center; padding: 5px;">1   5   0</td> </tr> <tr> <td style="padding: 5px;">Soybeans</td> <td style="text-align: center; padding: 5px;">5   0</td> </tr> <tr> <td style="padding: 5px;">Wheat</td> <td style="padding: 5px;"></td> </tr> <tr> <td style="padding: 5px;">Pasture</td> <td style="padding: 5px;"></td> </tr> <tr> <td style="padding: 5px;">Hay</td> <td style="padding: 5px;"></td> </tr> <tr> <td style="padding: 5px;">Other:</td> <td style="padding: 5px;"></td> </tr> </tbody> </table>				Crop Type	Expected Yield	Corn	1   5   0	Soybeans	5   0	Wheat		Pasture		Hay		Other:															
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<b>Soil Types:</b> <table border="1" style="width: 100%; border-collapse: collapse;"> <thead> <tr> <th style="padding: 5px;">Soil Unit Symbol</th> <th style="padding: 5px;">Soil Unit Name</th> <th style="padding: 5px;">Hydrologic Soil Group</th> <th style="padding: 5px;">Flooding Frequency Class</th> </tr> </thead> <tbody> <tr> <td style="padding: 5px;">B l g A 1</td> <td style="padding: 5px;">Blount silt loam, ground moraine, 0 to 2 percent slopes</td> <td style="padding: 5px;">D</td> <td style="padding: 5px;">N o n e</td> </tr> <tr> <td style="padding: 5px;">B l g B 1</td> <td style="padding: 5px;">Blount silt loam, ground moraine, 2 to 4 percent slopes</td> <td style="padding: 5px;">D</td> <td style="padding: 5px;">N o n e</td> </tr> <tr> <td style="padding: 5px;">Gwe5B2</td> <td style="padding: 5px;">Glynwood clay loam, end moraine, 2 to 6 percent slopes, eroded</td> <td style="padding: 5px;">D</td> <td style="padding: 5px;">N o n e</td> </tr> <tr> <td style="padding: 5px;">P m</td> <td style="padding: 5px;">Pewamo silty clay loam, 0 to 1 percent slopes</td> <td style="padding: 5px;">C / D</td> <td style="padding: 5px;">N o n e</td> </tr> <tr> <td style="padding: 5px;"> </td> <td style="padding: 5px;"> </td> <td style="padding: 5px;"> </td> <td style="padding: 5px;"> </td> </tr> <tr> <td style="padding: 5px;"> </td> <td style="padding: 5px;"> </td> <td style="padding: 5px;"> </td> <td style="padding: 5px;"> </td> </tr> </tbody> </table>				Soil Unit Symbol	Soil Unit Name	Hydrologic Soil Group	Flooding Frequency Class	B l g A 1	Blount silt loam, ground moraine, 0 to 2 percent slopes	D	N o n e	B l g B 1	Blount silt loam, ground moraine, 2 to 4 percent slopes	D	N o n e	Gwe5B2	Glynwood clay loam, end moraine, 2 to 6 percent slopes, eroded	D	N o n e	P m	Pewamo silty clay loam, 0 to 1 percent slopes	C / D	N o n e								
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**Applicable isolation distances:**

Type of Isolation Distance			
Surface waters of the state	<input checked="" type="checkbox"/>	Sinkhole/UIC class V drainage	<input type="checkbox"/>
Occupied building	<input checked="" type="checkbox"/>	Private potable water source	<input checked="" type="checkbox"/>
Medical care facility	<input type="checkbox"/>		

**Are any endangered species or endangered species habitats located on the beneficial use site?**

☐ Yes ☒ No

If "Yes" is marked, list the types of endangered species or endangered species habitat:

--	--

**Have biosolids been beneficially used on the site since July 20, 1993?**

☐ Yes ☒ No

If "Yes" is marked, list the biosolids generators and years beneficial use occurred:

Generator	NPDES permit No.	Year of Beneficial Use

**The application must also include all of the following:**

- ☐ A soil map of the proposed beneficial use site;
- ☐ A frequency flood class map of the proposed beneficial use site;
- ☐ An aerial map of the proposed beneficial use site that clearly identifies the entrance of the beneficial use site from the nearest road and all applicable isolation distances as established in Chapter 3745-40 of the Ohio Administrative Code;
- ☐ A vicinity road map at or near the township level that clearly identifies the proposed beneficial use site with all roads labeled; and
- ☐ A copy of the most recent soil test results identified in this form.

Division of Surface Water  
Application for Authorization: Class B Beneficial Use Sites

Ohio EPA Application for Authorization (8/15)

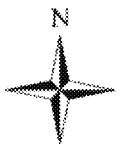
**Form BUA -5**

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# MOS-03-13 Setback Distance



0 0.05 0.1 0.2 Miles

Setback Distance	
MOS-03-13	
Total Area: 40.82 acres	
Setbacks:	
Residence - 300' Buffer	5.38 acres
Residence - 100' Buffer	0.03 acres
Surface Waters - 33' Buffer	1.32 acres
Total Setback Area:	6.73 acres

# Soil Map



Map Scale: 1:7,920 if printed on A landscape (11" x 8.5") sheet.

0 100 200 400 600 Meters

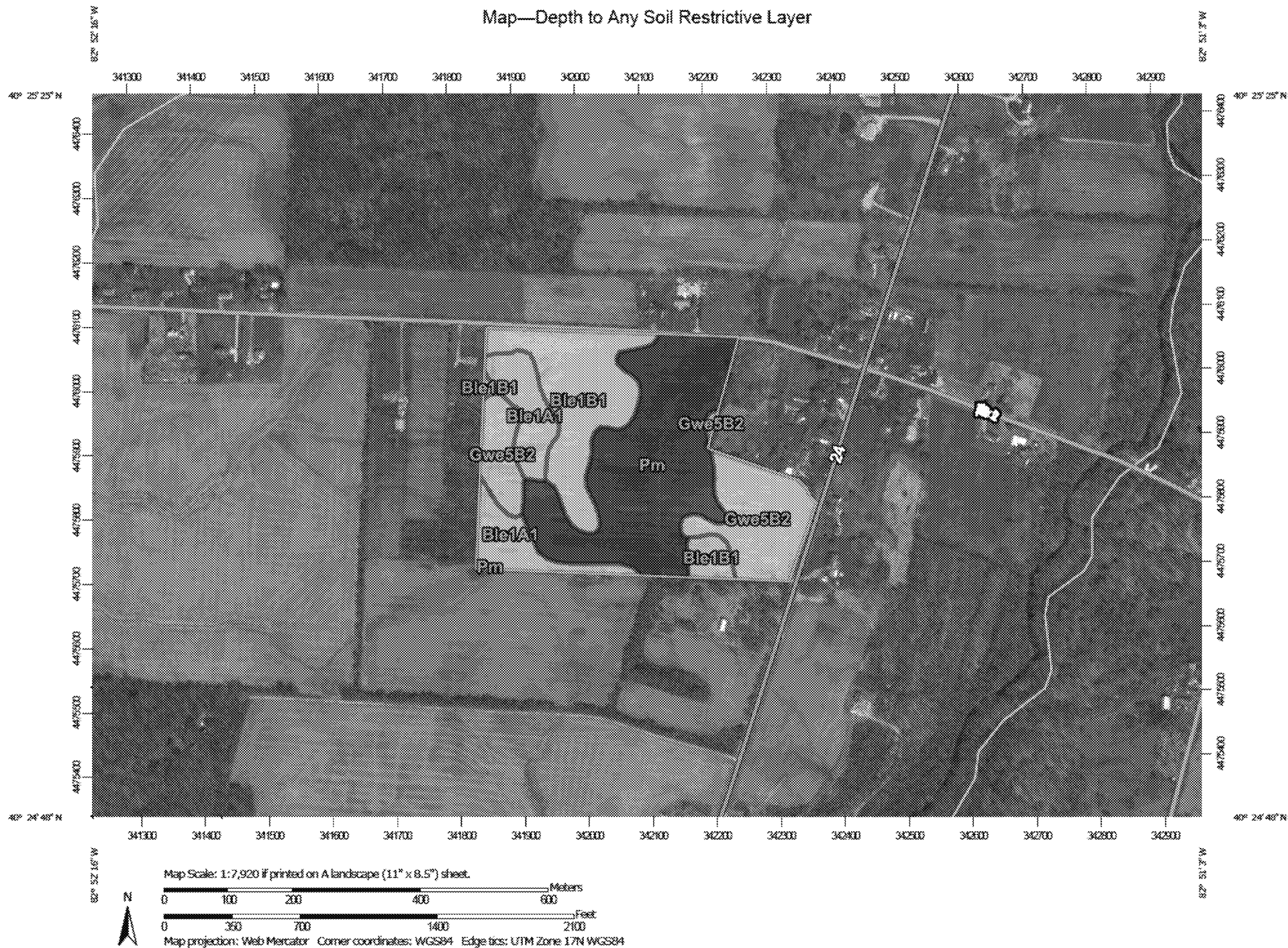
0 300 700 1400 2100 Feet

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 17N WGS84

## Map Unit Legend

Map Unit Symbol	Map Unit Name	Acres in AOI	Percent of AOI
Ble1A1	Blount silt loam, end moraine, 0 to 2 percent slopes	5.7	14.1%
Ble1B1	Blount silt loam, end moraine, 2 to 4 percent slopes	9.6	23.6%
Gwe5B2	Glynwood clay loam, end moraine, 2 to 6 percent slopes, eroded	8.6	21.0%
Pm	Pewamo silty clay loam, 0 to 1 percent slopes	16.9	41.4%
<b>Totals for Area of Interest</b>		<b>40.8</b>	<b>100.0%</b>

# Map—Depth to Any Soil Restrictive Layer

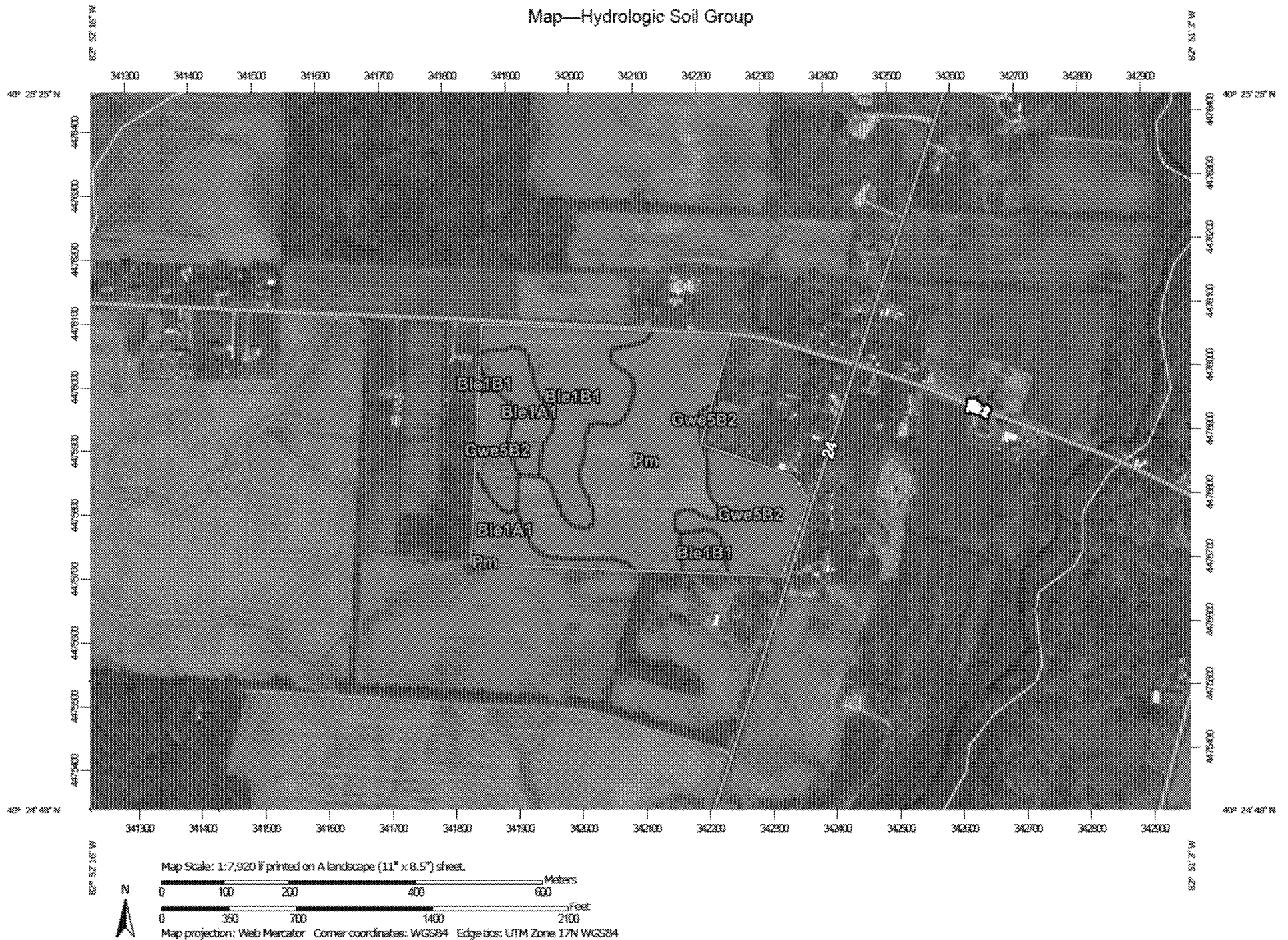


**Table—Depth to Any Soil Restrictive Layer**

Map unit symbol	Map unit name	Rating (centimeters)	Acres in AOI	Percent of AOI
Ble1A1	Blount silt loam, end moraine, 0 to 2 percent slopes	99	5.7	14.1%
Ble1B1	Blount silt loam, end moraine, 2 to 4 percent slopes	94	9.6	23.6%
Gwe5B2	Glynwood clay loam, end moraine, 2 to 6 percent slopes, eroded	76	8.6	21.0%
Pm	Pewamo silty clay loam, 0 to 1 percent slopes	>200	16.9	41.4%
<b>Totals for Area of Interest</b>			<b>40.8</b>	<b>100.0%</b>



# Map—Hydrologic Soil Group

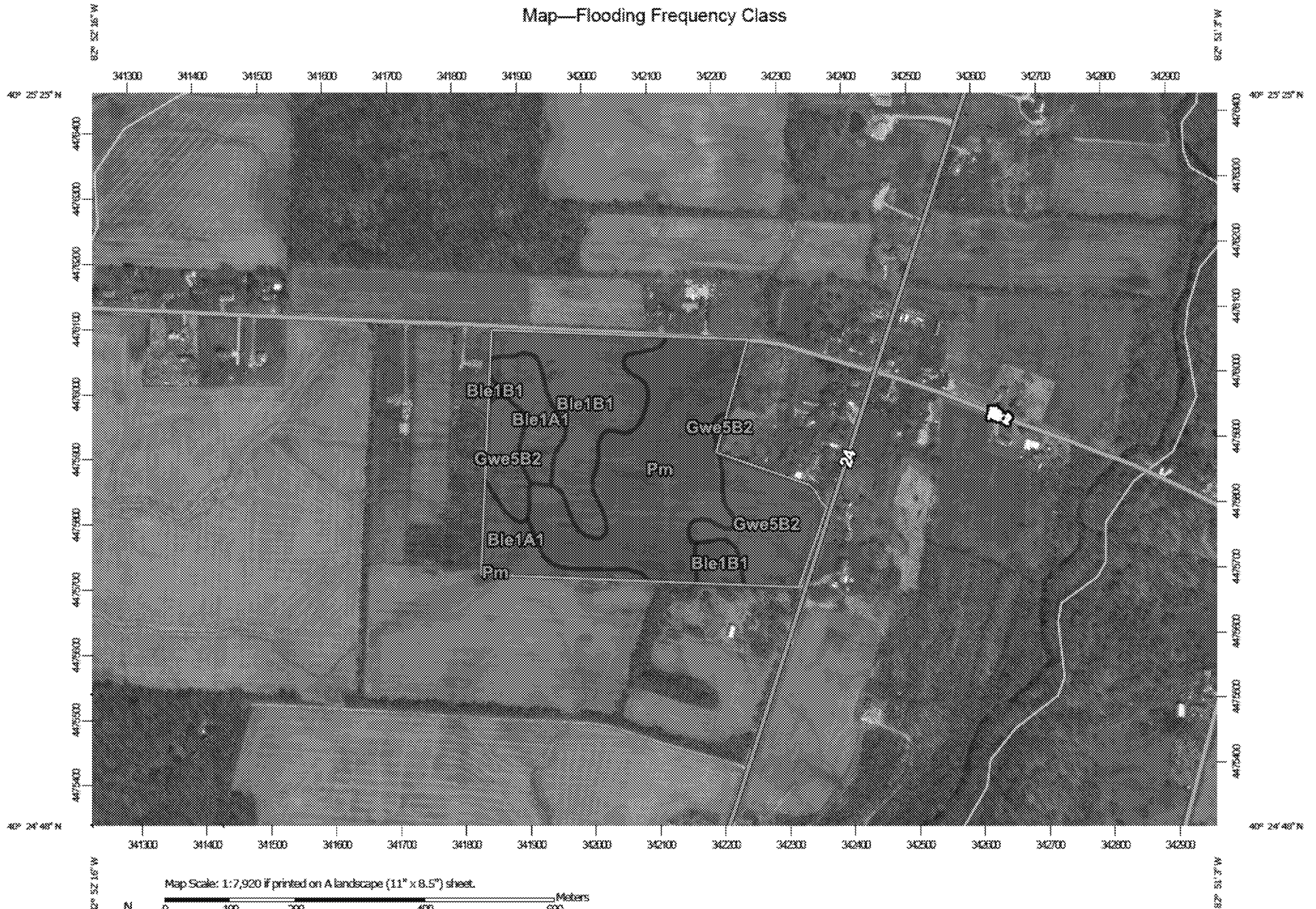




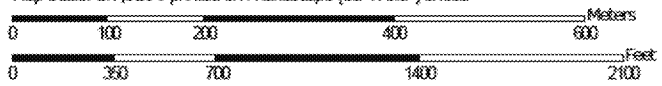
**Table—Hydrologic Soil Group**

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
Ble1A1	Blount silt loam, end moraine, 0 to 2 percent slopes	D	5.7	14.1%
Ble1B1	Blount silt loam, end moraine, 2 to 4 percent slopes	D	9.6	23.6%
Gwe5B2	Glynwood clay loam, end moraine, 2 to 6 percent slopes, eroded	D	8.6	21.0%
Pm	Pewamo silty clay loam, 0 to 1 percent slopes	C/D	16.9	41.4%
<b>Totals for Area of Interest</b>			<b>40.8</b>	<b>100.0%</b>

# Map—Flooding Frequency Class



Map Scale: 1:7,920 if printed on A landscape (11" x 8.5") sheet.



Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 17N WGS84

**Table—Flooding Frequency Class**

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
Ble1A1	Blount silt loam, end moraine, 0 to 2 percent slopes	None	5.7	14.1%
Ble1B1	Blount silt loam, end moraine, 2 to 4 percent slopes	None	9.6	23.6%
Gwe5B2	Glynwood clay loam, end moraine, 2 to 6 percent slopes, eroded	None	8.6	21.0%
Pm	Pewamo silty clay loam, 0 to 1 percent slopes	None	16.9	41.4%
<b>Totals for Area of Interest</b>			<b>40.8</b>	<b>100.0%</b>